

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1.-24. (Cancelled)

25. (Currently Amended) A computer readable medium having instructions for generating instances of a document based on a template structured according to ~~having a schema for a document generation system,~~ the schema comprising:

a template root element;

a template information element;

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template; and

an instances element containing at least one instance element.

26. (Currently Amended) A computer readable medium as claimed in claim 25, wherein the instance ~~instances~~-element is configurable to include a an instance data table element, a pages element, an overlays element, and a continuations element, ~~and a data element.~~

27. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the pages element is configurable to include a page element and the page element is configurable to include an overlays element and a composition element.

28. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the overlays element is configurable to include one or more overlay elements.

29. (Previously Presented) A computer readable medium as claimed in claim 26, wherein the continuations element is configurable to include one or more continuation elements and one or more overflow default elements.

30. (Currently Amended) A computer readable medium as claimed in claim 26, wherein the instance data table element is configurable to include one or more datum elements.

31. (Withdrawn) A computer readable medium having a data structure for a document, the data structure comprising:

an instance element; and

one or more pages, each page including one or more compositions, each composition configurable to include a collection of unique data placements and a level, and capable of manifesting itself as a document page, a page-level overlay, or an instance-level, conditional overlay.

32. (Withdrawn) A computer readable medium as claimed in claim 31, wherein each composition includes a composition information element, a regions element, a font element, a field modifiers element, and a field table.

33. (Withdrawn) A computer readable medium as claimed in claim 31, further comprising one or more continuations elements and one or more overflow default elements.

34. (Currently Amended) A computer readable medium having instructions for generating instances of a document based on a template defining a data structure for the a-document, the data structure comprising:

a template root element;

a template information element;

a data table element; and

an instances element including at least one instance element configured to describe how a document is constructed, the instance element including an instance data table element and at least one continuations element, the continuations element defining continuation handling for data included in the data table element, the instance data table element, or both.

35. (Currently Amended) A computer readable medium as claimed in claim 34, wherein the template information element includes descriptive information about the template root element.

36. (Currently Amended) A computer readable medium as claimed in claim 35, wherein the descriptive information includes a title element that contains a title for the document at hand, a

description element that is a container for free-form text about the template root element, a help text element, which is a container for free-form information that may be useful to a consumer of the document, and a document type element that is provided to support a type element from other schemas or DTDs.

37. (Previously Presented) A computer readable medium as claimed in claim 34, wherein the template information element includes a print constraints element which is a container for special values that may be needed or used by a printing environment.

38. (Previously Presented) A computer readable medium as claimed in claim 34, wherein the data table element includes data values to be used in a specific instance of a template.

39. (Previously Presented) A computer readable medium as claimed in claim 38, wherein the data table element defines a structure of data values that can be accessed by name, or by a combination of name and one or more indices.

40. (Cancelled).

41. (Currently Amended) A computer readable medium as claimed in claim ~~[[40]]~~34, wherein each instance~~[[s]]~~ element is configurable to include a pages element, and an overlays element, ~~a continuations element, and data table element.~~

42. (Previously Presented) A computer readable medium as claimed in claim 41, wherein each pages element is configurable to include one or more page elements.

43. (Previously Presented) A computer readable medium as claimed in claim 42, wherein each page element is configurable to include an overlays element and one or more composition elements.

44. (Previously Presented) A computer readable medium as claimed in claim 43, wherein each overlays element may include one or more overlay elements.

45. (Previously Presented) A computer readable medium as claimed in claim 44, wherein each continuations element is configurable to include one or more continuation elements and one or more overflow default elements.

46. (Previously Presented) A computer readable medium as claimed in claim 45, wherein continuation elements are configured to be used by a processor to process overflows.

47. (Withdrawn) A computer-implemented method of generating a document, the method comprising:

generating one or more composition elements, each composition element configurable to include a level, and capable of manifesting itself as a document page, a page-level overlay, or an instance-level, conditional overlay; and

laying composition elements on a rendering surface such that elements with a high level replace elements with a low level;

wherein each composition element includes pre-authored formal content.

48. (Withdrawn) A method as claimed in claim 47, wherein each composition element is configurable to include a field target and the method further comprises

processing an overflow condition when a data value assigned to a field target cannot be drawn in the available space according to the attributes governing that space.

49. (Withdrawn) A method as claimed in claim 48, wherein processing an overflow condition includes applying a font reduction to a field and placing the field on a page in which the overflow condition occurred.

50. (Withdrawn) A method as claimed in claim 48, wherein processing an overflow condition includes moving a field to a continuations page.

51. (Withdrawn) A method as claimed in claim 48, wherein processing an overflow condition includes moving one or more fields to a single continuation page and arranging the fields with a caption and a forwarding message.

52. (New) A computer readable medium having instructions for generating instances of a document based on a template structured according to a schema, the schema comprising:

a data table element configured to contain data that is used to transform an abstract instance of a document template to a concrete instance of a document template; and

an instances element containing at least one instance element.